

Educational Environment Risks: Problems of Identification and Classification

Leysan R. Kayumova & Venera G. Zakirova
Kazan (Volga region) Federal University, RUSSIA

•Received 11 September 2015 •Revised 29 January 2016 •Accepted 23 March 2016

The relevance of the research problem is determined by the multidimensionality of educational environment, that is the system of business and interpersonal relationships of educational process subjects. The maintenance of these relations defines quality and nature of risks for teachers and their pupils. The article aims to identify and justify the contradictions between the existing methods, to reduce the negative factors and the current state of educational environment, between established theoretical principles in organization of educational process and the needs of educational practice. The article deals with the content of the concept, with the problem of identification and risks classification of educational environment. There are drawn up recommendations to reduce the negative impact of risks on the participants in educational process. The leading methods in the study of this problem are the comparative and diagnostic methods (questionnaires, tests, interviews), in order to identify the risks of educational environment. The study involved students of distance learning, practicing teachers of educational institutions of Tatarstan Republic. Materials can be used by teachers of higher educational institutions in the learning process of students of pedagogical specialties.

Keywords: pedagogical interaction, risks of educational environment, factors of risks formation, resistance to stresses, pedagogical competence.

INTRODUCTION

The relevance of the research topic is caused by the basic changes happening in society in recent decades. Continuously increasing high rate of information systems progress, the emergence and development of new directions in sciences, socio-humanitarian studies often borders with unwillingness and fear of society to accept and implement new knowledge in terms of real activity (Zaitseva, 2013; Kozhanova et al., 2015; Kalimullin & Masalimova, 2016; Zakirova, Masalimova & Nikoghosyan, 2016; Tagunova et al., 2016). The heterogeneity and inconsistency of this situation allows us to talk about the high level of society exposure to stresses, susceptibility of people to be affected with various risk factors. As a result, it leads to irreversible disastrous consequences which are reflected in crisis phenomenon in industry,

Correspondence: Leysan R. Kayumova,
Kazan (Volga region) Federal University, 18 Kremlyovskaya Street, 420008, Kazan, RUSSIA
E-mail: kaioum@mail.ru
doi: 10.12973/ijese.2016.370a

culture of society, reducing living standards, deterioration of their psychological and somatic status.

The category "risk" is multi-disciplinary in nature and every field of scientific knowledge reveals specific features and originality of the risk within a particular realities of life. A variety of approaches to the interpretation of the concept is explained by the complexity of phenomenon which has a lot of not coinciding and sometimes opposite real reasons. One of the traditional approaches is connected with consideration of risk as a measure of alleged failure, danger in relation to a concrete kind of activity.

Modern educational environment is saturated with many different risk factors. Conventionally these factors can be divided into the risks of pupils and teachers. If students' risks are studied in detail, there are methods to overcome and minimize the negative impact, and then the risks of educational activities are less developed problem of modern pedagogy and psychology (Valeeva, 2015). Often teachers themselves facing risks of pedagogical activity don't know the ways of overcoming of risk situation.

The aim of this study is to analyze and compare existing classifications of educational environment risks from the standpoint of professional and educational activities, identification of levels of teachers' preparedness to work in conditions of risk, risk assessment on the impact of the activities and relationships of teachers as participants in the educational process

Literature review

Teaching risk is defined as the probability of the possible inefficiencies of the pedagogical process, caused by lack of understanding of the participants and the nature of the possible consequences of external threats of modern society for biological, social, cultural and economic safety of human life (Shabrov, 2009).

The problems of identification and analysis of risks, their influence on professional activities is reflected in the works of V. A. Devisilov (2011), E. N. Boyarov, S. V. Abramova (2012), N. N. Sabinina (2010), E. N. Mikhailova (2010), E. A. Bagnetova, E. R. Sharifullina (2013), E. Yu. Polovneva (2011), A. A. Arlamov (2010)

V. G. Zakirova & L. A. Kamalova (2015), E. G. Sabirova (2012) engaged in the issues of professional training of future teachers with regard to health-saving technologies and create the optimal environment for professional activities. The relevance of special psychological and pedagogical training of teachers for working in conditions of risk through increasing the level of professional consciousness is observed in the studies of E. R. Habibullin (2008), C. R. Gromova (2012), E. N. Boyarov, S. V. Abramova (2012).

MATERIALS AND METHODS

Methods of study

The aim of the study was the investigation of the educational environment of risk system interdependencies between the risks of the educational environment and interpersonal relationships intra-school team.

Assessment of social and psychological climate in the team on polar profiles

To investigate the state of intra-school team interpersonal relationships in secondary educational institutions in our study, we used assessment sheets of social and psychological climate in the team on polar profiles. This method allows to diagnose the level of formation of the group as a collective. In addition, we can

analyze the extent of adaptation of our graduates in the school community. 13 pairs of polar properties peculiar for a group are given in the method. The left column shows the properties of a favorable climate, the right one respectively shows negative properties. Diagnostic participants estimate properties of the group psychological climate (the school teaching staff) on a scale from 3 to -3. (Rogov, 1999)

Diagnostic test of haim coping-strategies

The method allows to identify individual coping styles with stress. The methodology consists of three sections corresponding to three groups of coping-strategies (cognitive, emotional, behavioral). Behavior options within each section can be adaptive, nonadaptive and relatively adaptive (productive, unproductive and relatively productive). Diagnostic participants should choose one statement from each group (Dmitriev, 2010).

Questionnaire "educational environment risks"

Participants were offered to list risks factors of the educational environment which they directly faced in the course of the professional activity. Questionnaire sheet was divided into two parts for the preliminary classification of the risks to internal and external. In questionnaires it was also necessary to point the age and experience of respondents.

The experimental base of the study

The research was conducted on the basis of the Institute of Psychology and Education KFU and Kazan secondary educational institutions (schools and gymnasiums) in 2014 and 2015. For diagnostic there were used Assessment sheets of social and psychological climate in the team on polar profiles, Questionnaire "Educational environment risks", Diagnostic Test of Haim coping-strategies.

RESULTS

Questionnaire "Educational environment risks"

In order to identify the risk factors of the educational environment, which directly face the teachers, we conducted a questionnaire. On sheets of diagnostic questionnaire participants were asked to name risk factors, their intensity and to list threats of risk factors of the educational environment in ascending order. The study results showed that every teacher is constantly exposed to simultaneously impact to several risk factors of varying strength and intensity. The majority of respondents identified two main groups of educational environment risks: internal and external.

Internal risks include teachers problems of "intra-school life", by emphasizing only the direction of relationships between participants of educational process: school administration, troubled students, parents, invited experts from other spheres of activity, the generation gap. The triangle relationships "parents-students-teacher" are core relationships. This means that teachers have noted the variability of this factor on the basis of the attitude of parents towards the children education. The main types of problems related to the overprotection of the child and as a consequence of enhanced control over the activities of the teacher, the child and parent alienation, parents outdated views on school, non-acceptance of new training and other programs.

Under external factors, the teachers of secondary educational institutions get the negative impact of the state regulatory authorities of the educational system. It complicates the attestation system of education workers, controlling the educational process, frequent innovations, a sophisticated document management system, the lack of legal protection for teachers in case of conflict situations.

Also there were separately identified risks connected with the technical parameters of educational environment safety. Despite the increase in financing and equipping of educational institutions, the question of creating a safe school environment remains open. Teachers note an insufficient level of technical equipment of schools and gymnasiums video and audio surveillance, frequent absence the fenced-off external territory of institutions, classrooms for safety.

Diagnostic results of haim coping-strategies

Based on the questionnaire "educational environment risks", we can draw a conclusion about high concentration of risks in the professional work of teachers, which negatively affects the professional activity and psychological instructor safety.

The increasing risk of educational environment requires the allocation of the environmental component as an important element of professional competence. Noxological component in teacher training system is manifested in the willingness and ability of the individual to use in the professional activity acquired a body of knowledge and skills to provide security in the area of professional activity in thinking nature, in which safety issues are addressed as a priority (Boyarova & Abramov, 2012). In noxological competence also includes the ability to assess, warn, minimize negative environmental factors, which is defined as teachers stress resistance (Malyshev, 2013).

Diagnostic results of Haim coping-strategies allowed us to make the following conclusions.

The majority of diagnostic participants (78%) shows the usage of relatively adaptive variants of coping-behavior in risk situations. The efficiency of these behavior options depends on specifics of situations. Only 8% of respondents showed the usage of adaptive behavior options. It is the analysis of the arisen difficulties, search of possible options of situation permission, prediction of further dangers. Basically adaptive option of coping-strategy is peculiar to young teachers, free from influence of traditional behavior model of educational institution.

The analysis of the emotional coping-strategies shows that the majority of teachers (64%) show adaptive variants of coping-strategies. Vivid protest about the difficulties is replaced by optimism, confidence in available output of situation. These types of behavior are typical for young teachers (22-35 years). Older generation (45 and over), as well as young teachers who didn't pass the social and psychological adaptation in the school community (28%) choose non-adaptive behaviors in risk cases, which are expressed in the suppression of emotions, humility, self-blame, aggression.

Behavioral coping-strategies are mainly represented by a relatively adaptive behavior ("compensation", "distraction", "constructive activity") (60%) and adaptive behavior ("cooperation", "treatment", "altruism") (18%). However, there is a group of teachers (24%) with non-adaptive strategy of behavior (avoiding thoughts of troubles, passivity, solitude, tranquility, isolation, desire to withdraw from active interpersonal contacts, denial solving problems).

The choice of these or those behavior options in a situation of risk is connected with many factors. Of course, they are problems of social and psychological adaptation of young teachers, and the risk of emotional burnout among the older generation teachers. Also we consider that the essential role in the problem of teachers' stress plays an insufficient level of noxological teacher training.

Classification problems of educational environment risks

The concept "risk" in modern pedagogical science is quite complex phenomenon, and, as noted N. N. Sabinina (2011), due to the interdisciplinary nature of the risks and poly-objectivity of this concept, there cannot be a common approach.

In psychological and educational literature there are four major approaches to the classification of the educational environment risks, which are based on the analysis of the professional work of the teacher. Analysis results of the classification approaches are presented in the table.

Table 1. Comparison of approaches to the classification of the educational environment risks

Nº	Author, title	Brief description	Features	Contradictions
1.	Abramova I.G. Pedagogical risks (1996)	The object of risks study is the professional activity of the teacher. The following risks are allocated: strategic, mismatches, physical, dispositional, discrepancies, inaction, technological	Introduction "pedagogical risk" concept into the science. Isolation of risks specific to the entire teaching process as a whole. Approach is based on activity approach. The interaction of teachers and children is analyzed, where the unit of analysis of this interaction is "the risk as a measure of their joint activities success"	Disadvantages, first of all, are connected with the problem of input of new concept and the level of society and science development at the time of work creation (1996).
2.	Mikhailova E.M. Pedagogical risks in research and experimental activities (2010)	The object of risks study is research and experimental work of the teacher. The following risks are allocated: strategic, mismatching, physical, dispositional, discrepancies, methodological, inaction, technological, economic	It is the amended version of classification of Abramova I.G. (Author singled out methodological and economic risks).	Classification is aimed only at specific disclosure of specific activities
3.	Sabinina N. N. Risks in innovative activity of teacher (2011)	The object of risks study is innovative activity of the teacher. The following risks are allocated: physical, personal, technological, economic, methodological, resistance, pseudo-innovations	Risks of innovative pedagogical activity are opened. The author especially allocates personal risks which consist of mismatch risks, change of the status, temporary loss of competence.	Classification didn't include such qualitative characteristics of risks as affordability in overcoming, extent of influence on the subject of process
4.	Belyaev M.A. The classification of risk zones in educational activities (2014)	The object of risks study is the professional activity of the teacher. The following zones of risks are allocated: personnel, contingent risks, procedural risks, image risks	As a basis for classification there are allocated pedagogical risk areas. The author points out the importance of studying risk management in pedagogy.	Not enough attention is paid to the personal relationships of educational process participants

Thus, the study shows, that the approaches to the classification of domestic teachers are the peculiarities of the object. Pedagogical (innovative, experimental) activity is a source of risks in them and the influence and ways of risks minimization are studied. We believe that it is necessary to consider these risks based on the psychological and physiological characteristics of the subject (participant) activity, to teach this participant to identify, assess, warn or minimize the educational environment risks.

DISCUSSION

Teaching environment risks are the relevant problems of modern pedagogical science. The devastating impact of the risks can be the cause of reducing the education efficiency, deteriorating mental and physical health of teachers. According to the stress resistance study, we can make a conclusion about the formation of some teachers productive (relatively adaptive and adaptive) coping-strategies existence from the risk situations. However, the presence of these behaviors in most cases is the result of experience gained or psychological and physiological characteristics of the teacher. We affirm that every teacher should have a basic model of behavior in situations of risk within noxological competence of professional activity. Therefore, it is required to develop the system of formation of teachers, future teachers a range of skills activities in terms of risks in the educational environment of the school.

CONCLUSION

In the study there were used comparative and diagnostic methods of research (questionnaire, test, interviews), in order to identify the risks of the educational environment. The conducted research revealed the need of deeper study of the educational environment as risk zones for teachers' professional activity. We came to the conclusion that pedagogical riskology retains its relevance in the situation of continuous development and transformation of the educational environment. Therefore, the system of training teachers for modern school should contain basic noxological component for the formation of future teachers noxological competencies.

ACKNOWLEDGMENTS

The work is performed according to the Russian Government Program of Competitive Growth of Kazan Federal University

REFERENCES

- Abramova, I. G. (1996). *The theory of pedagogical risk*. PhD Thesis. St. Petersburg.
- Arlamov, A. A. (2010). Pedagogical risk as the problem related to methodology of social pedagogy. *Bulletin of Adygei state university*, 1, 121-136.
- Bagnetova E. A. & Sharifullina E. R. (2013). The occupational risks of the pedagogical environment. *Fundamental researches*, 1 (1), 27-31.
- Belyaeva, M. A. (2014). Risk as an object of scientific analysis in pedagogy and education. *Pedagogical education in Russia*, 11, 16-23.
- Boyarov, E. N. & Abramova S. V. (2012). Noxologic approach in the education content for life safety teachers. *Pedagogical education in Russia*, 4, 111-116.
- Devisilov, V. A. (2011). Noxological aspects of education humanization. *Higher education in Russia*, 1, 129-132.
- Dmitriev, M. G., Belov, V. G. & Parfenov, Yu. A. (2010). Psychological and pedagogical diagnosis of delinquent behavior among troubled teens. St. Petersburg: CJSC "PONY".

- Gromova, Ch. R. (2012). Psychological and educational conditions for cooperation between primary school teachers and parents in course of educational correction of schoolchildren's aggressive behaviour. *The theory and practice of social development*, 4, 117-119.
- Kalimullin, A. M. & Masalimova, A. R. (2016), Editorial: Actual Issues of National Education: Theory and Practice. *Mathematics Education*, 11(1), 1-2.
- Khabibullin, E. R. (2008). *Readiness to take risks as a factor of effective teaching activities in situations of uncertainty*. Doctoral dissertation. Moscow.
- Kozhanova, T. M., Karev, B. A., Khabibullina, G. Z., Ibragimov, I. D., Khisamiyeva, L. G., Zaytseva, N. V., Kulkova, M. A. (2015). The Didactic Construct of Design Technologies in the Educational Process of Modern University. *Mediterranean Journal of Social Sciences*, 6(2 S3), 225-232.
- Malyshev I. V. (2013). Socio-Psychological Personality Adaptation and Strategies of Coping-Behavior of School Teachers in the Process of Professional Socialization. *News of Saratov University*, 1 (2), 30-34.
- Mikhailova, E. N. (2010). Pedagogical risks in research and experimental activities: forecasting and mitigation. *World of science, culture, education*, 3, 98-100
- Polovneva, E. Yu. (2011). Professional Risk as the Pedagogical Category. *Bulletin of Transbaikal State University*, 2, 71-74.
- Rogov, E. I. (1999). *Handbook of a practical psychologist*. Moscow: VLADOS.
- Sabinina, N. N. (2011). Risks in innovative activity of the teacher and their preventive maintenance. *World of Science, Culture, Education*, 6 (1), 85-89.
- Sabirova, E. G. (2012). Types of interrelations between teacher and pupil in the informational and educational environment. *Kazan pedagogical magazine*, 1 (91), 159-163.
- Shabrov, P. N. (2009). Social and pedagogical risks as characteristic feature of modern Russian school. *The bulletin of the Kostroma state university of N. A. Nekrasov*, 4(15), 408-412.
- Tagunova, I. A., Selivanova, N. L. & Valeeva, R. A. (2016). The Category of Upbringing in Russian and Western Studies. *Mathematics Education*, 11(1), 3-11.
- Valeeva, R.A. (2015). Editorial. An International Review of the Possibilities of Educational Environment in the development of Students and Teachers. *International Journal of Environmental and Science Education*, 10(4), 514.
- Zaitseva, N. A. (2013). The role of education system in adaptation of graduates from Russian institutes and colleges at European enterprises (by example of service companies). *Middle East Journal of Scientific Research*, 13(5), 693-697.
- Zakirova, V. G. & Kamalova, L. A. (2015). The formation of the pedagogical values of future primary school teachers at the University. *Review of European Studies*, 7 (5), 1-9.
- Zakirova, V. G., Masalimova, A. R. & Nikoghosyan, M. A. (2016). The Contents, Forms and Methods of Family Upbringing Studying Based on the Differentiated Approach. *Mathematics Education*, 11(1), 181-190.

